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June 26, 2003

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington DC 20554

***Re: WT Docket No 99-87, RM-9332; Implementation of Sections 309(j) and 337 of the
Communications Act of 1934 and Promotion of Spectrum Efficient Technologies
on Certain Part 90 Frequencies***

EX PARTE COMMUNICATION

Dear Ms. Dortch:

Pursuant to Section 1.1206(b)(1) of the Commission's Rules, I am electronically filing this notice of a written *ex parte* communication.

Yesterday, the undersigned on behalf of the Association of American Railroads, together with Mr. Edwin Kemp representing the Union Pacific Railroad, Mr. Barry Metzger representing CSX Transportation Company, Dennis J. Starks, Esq., Senior Commerce Counsel, Association of American Railroads, Mr. Howard Moody representing the Association of American Railroads, and Mr. Robert McCown representing the Federal Railroad Administration, met with members of the Commission's staff to discuss the position of the U.S. railroad industry regarding the Second Report and Order, (FCC 03-34), released February 25, 2003, in the above-referenced proceeding. Representing the Commission at the meeting were Ms. D'wana Terry, Mr. Herb Zeiler and Mr. John Borkowski, of the Public Safety and Private Wireless Division of the Wireless Telecommunications Bureau. The attached briefing paper was presented to the staff at the meeting.

Please contact the undersigned if there are any questions about this submission.

Respectfully submitted,



Thomas J. Keller
Attorney for Association of American Railroads

Attachment

cc: Meeting Participants

**Briefing to the Staff of Public Safety
and Private Wireless Division**

Concerning

**Adverse Effects of Narrowband
Deadlines on the Railroad Industry**

June 25, 2003

The Railroads Opposed NB Deadlines

In Comments filed on March 5, 2001 in WT Docket No. 99-87, the railroads opposed arbitrary deadlines for narrowbanding for two reasons:

- First, the railroad network installed base is enormous
 - 15,000+ base stations (see map)
 - 90,000+ mobiles
 - 125,000+ portables
 - 21,000+ “EOT” devices
 - 5,000+ trackside defect detectors

The Railroads Opposed NB Deadlines (cont'd)

- Second, unlike any other mobile radio network, the railroad mobile radio system must operate as a single, interoperable nationwide network, covering widely divergent terrain and operating conditions. This, in turn, requires:
 - **integrated, industry-wide planning and cooperation, and**
 - **complex planning and careful, time-consuming implementation**

Locomotive Narrowband Radios Not Yet Available

- To date, there is no locomotive narrowband radio available from manufacturers
- Locomotive “clean cab” radio is not an “off the shelf” item
 - **Specialized industry-wide requirement for form, fit, function**
- First narrowband locomotive radio (dual bandwidth) not available until 4th Q 2003
- Thus, the entire locomotive fleet (approx. 30,000 radios) is still wideband-only

New Base Stations are Constantly Being Added

- **Base stations in the nationwide railroad mobile radio network are routinely added and modified to accommodate changing operational requirements**
 - Dispatcher territory realignments
 - Changes in regional boundaries
 - Addition of large customer in remote area or new territory
 - Mergers or acquisitions
 - Installation of additional defect detectors
 - Major construction or maintenance projects

Mixing WB-NB Modes May Be Problematic

- **The six month deadline for NB-only radios will force the railroads into a mixed-mode situation**
 - If a new or modified dispatch base station must be narrowband-only, it may not be compatible with the wideband-only locomotive radios
- **Mixed mode operation may degrade the quality of the communication**
 - Reduced audio volume level
 - Audio distortion
 - Squelch issues?

Extent of WB-NB Degradation Not Clear

- How bad is the mixed mode degradation?
- Don't know yet -- the matter is still being studied by:
 - The railroads
 - Federal Railroad Administration
 - Institute for Telecomm. Science (NTIA)
 - Equipment manufacturers

The Migration to NB Requires Switchable Dual Mode Radios

Railroads need the flexibility to install switchable dual mode equipment to accomplish the migration from WB to NB

- The commenter who suggested the six-month deadline (Motorola) recommended a cut-off for wideband-only installations
 - Switchable dual mode installations would have continued to be permissible under Motorola proposal.
 - But FCC went further and prohibited dual mode installations after six months.

Proposed Course of Action

- Railroads intend to seek relief from NB deadlines imposed in Docket No. 99-87
 - Reconsideration and/or Waiver
 - Request for stay of six-month NB-only deadline for mods and new stations

Conclusion and “Big Picture”

- Migration to narrowband extremely important, but is only one aspect of the “big picture” concerning railroad communications technology
- Communications technology is now the driving strategy for changes in operations and business planning:
 - Software Defined Radio
 - Digital Platforms
 - Narrowband
 - Trunking
 - Defect Detection
 - AEI and other Asset Tracking
 - Train Control and Automation
 - RCL
- RR_s vigorously pursuing spectrum-efficient technology
 - New industry-wide channel plan for narrowband migration
 - Portland Pilot Program for “Project 25” digital platform

Conclusion and “Big Picture” (cont’d)

- In the 160 MHz band, railroads in U.S. and Canada have contiguous channels (not interleaved with others)
 - Thus, the railroads’ migration to narrowband is “self-contained” and does not affect other users.
- There are many positive benefits from the FCC’s “Ribbon License” approach for ATCS channels at 900 MHz; therefore, RRs are considering requesting similar status for 160 MHz channels